IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:)
Andrew Z. FIRE et al.)) DETITION UNDED 27 C E D \$ 1 102
U.S. Patent No.: 6,506,559) PETITION UNDER 37 C.F.R. § 1.182) TO REPRINT THE FRONT PAGE
Application No.: 09/215,257	OF THE LETTERS PATENT
Filed: December 18, 1998)
Issued: January 14, 2003) ** Hand-Carry To Office Of Petitions
) Crystal Plaza 4, Room 3-C23 **
For: GENETIC INHIBITION BY)
DOUBLE STRANDED RNA	.)
	RECEIVED
Office of Petitions	
Assistant Commissioner for Patents	JAN 22 2003
Washington, D.C. 20231	OFFICE OF PETITIONS
	· - · · - · · · · · · · · · · · · ·

07/18/2003 AKELLEY 00000012 500310 6506559

This is a Petition under 37 C.F.R. § 1.182 to request that the front page of the attached original Letters Patent be corrected and reprinted to include the correct names of the assignees.

Accompanying this petition is a second petition requesting that the rules under 37 CFR §3.81(a) be waived to permit the correct names of the assignees of the above-mentioned patent to be provided after issuance.

On October 22, 2002, Applicant's agent submitted two copies of Issue Fee Transmittal Form PTOL-85 noting the sole assignee as "Carnegie Institute of Washington." This assignee designation was erroneous in two respects:

- (1) A second assignment to "The University of Massachusetts" was recorded on March 19, 1999, at Reel/Frame 009825/0207 (copies of the Notice of Recordation and assignment documents are attached hereto); and
- (2) "Carnegie Institute of Washington" contains an inadvertent error in that the word "Institute" should actually be "Institution" (see copies of Notice of Recordation and assignment



ORNEY DO ET NO.: 056100-5021-01 Patent No.: 6,506,559

Petition Under 37 C.F.R. § 1.182 - Page 2

attached hereto). Thus, the correct name of the first assignee should be "Carnegie <u>Institution</u> of Washington," and "The University of Massachusetts" should be included on the face of the patent as the second assignee. As explained in the attached petition under 37 CFR §1.183, the error was inadvertent and due to high public interest, the Office should reprint the first page, particularly in view of patentee's promptness in seeking the requested relief.

According to 37 CFR §1.182, all situations not specifically provided for in the regulations will be decided in accordance with the merits of each situation by or under the authority of the Commissioner. The Commissioner therefore has the authority to approve reprinting of the first page of the Letters Patent. While Applicant is aware that the original Letters Patent is reprinted only under very rare circumstances, as explained in the attached Petition under 37 CFR §1.183, justice requires that the correct assignees be named on the face of the patent in the present case.

The above-mentioned patent covers one of the most important inventions of the year, an invention that is jointly owned by Carnegie Institution of Washington and The University of Massachusetts. The importance of the invention is emphasized by several scientific articles submitted herewith and discussed in the accompanying petition under 37 CFR §1.183. Given the importance of the invention and the number of readers that will no doubt request a copy of the patent, it is only fair that both of the owners of this important invention are shown on the face of the patent. Listing the second assignee in a certificate of correction rather than on the face of the patent would not serve justice adequately, since the face of the patent would be viewed by potential readers much more frequently than a certificate attached to the patent. Failure to correct the face of the patent to reflect the names of both assignees would rob the second

ATTORNEY DOCEET NO.: 056100-5021-01

Patent No.: 6,506,559

Petition Under 37 C.F.R. § 1.182 - Page 3

assignee of its due recognition as a co-owner of the invention, an injustice that should not prevail solely because the Applicant's agent made an inadvertent error in completing the PTOL-85 form.

The \$130.00 petition fee required by 37 C.F.R. § 1.17(h) is being submitted with this Petition. The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment, to Deposit Account 50-0310.

Respectfully submitted,

RECEIVED

JAN 22 2003

OFFICE OF PETITIONS

MORGAN, LEWIS & BOCKIUS LLP

Bonn New Mixed

Bonnie Weiss McLeod, Ph.D.

Reg. No. 43,255

January 22, 2003

CUSTOMER NO.: 009629

MORGAN, LEWIS & BOCKIUS LLP

1111 Pennsylvania Avenue, N.W.

Washington, D.C. 20004 Telephone: 202-739-3000 Facsimile: 202-739-3001

Attachments:

- Petition under 37 CFR §1.183 to Waive the Rules under 37 CFR §3.81(a)
- Notice of Assignment recordation and assignment for University of Massachusetts
- Notice of Assignment recordation and assignment for Carnegie Inst. of Washington
- Letters Patent
- Journal article: Science, Dec. 2002, Vol. 298, pages 2296-97
- Journal article: excerpt from The Wall Street Journal, Tuesday, Aug. 6, 2002
- Journal article: Genetic Engineering News, Dec. 2002, Vol. 22(21), pages 1, 3, 70 & 80
- Meeting agenda, Applications of RNA Interference, Feb. 10-11, San Diego, CA

BOX 45SIGNMENTS	DO NOT USE FOR TRADEMARKS
	ORM COVER SHEET
TO THE ASSISTANT COMMISSIONER OF PATENTS AND TR	ONS & PATENTS ONLY
SIR: PLEASE RECORD THE ATTACHED ORIGINAL DOCUME	
1. NAME OF CONVEYING PARTY (IES) (ASSIGNORS(S)):	INTO ON COPT THEREOF.
	2. Samuel E. Driver
3. Craig C. Mello	4.
5.	6.
	8
ADDITIONAL NAME(S) OF CONVEYING PARTY (S) ATTACH	HED? □YES ⊠NO RECEIVED
	1011
2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST: NAME: The University of Massachusetts	JAN 22 2003
NAME: The University of Massachusetts	OFFICE OF PETITIONS
ADDRESS: One Beacon Street, Boston, Massachusetts 02108	FEITIUNS
ADDITEOU. ONO BORGON CCO., E.E.C.,	
ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? YES	s ⊠no
3. NATURE OF CONVEYANCE (DOCUMENT):	
(Submit herewith only one document for recordation—multiple	le copies of same Assignment signed by different inventors is one
document)	
☐ ☐ ASSIGNMENT OF ☐ WHOLE ☐ PART INTE	
1	2nd Inventor: March 1, 1999; 3rd Inventor:
☐CHANGE OF NAME ☐ACCURATE TRANSLATION	February 19, 1999∜ N
☐SECURITY ☐MERGER ☐OTHER: CO	
DECORIT LINEIUME LESS	JARECHON
EXECUTION DATE(S) ON THE DECLARATION IF FILED HERE	FWITH: (NOTE: IF DATES ON DECLARATION AND
ASSIGNMENT DIFFER <u>SEE ATTY!</u>)	
4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL	
A. PAT. APP: NO:(S): M## 1.5 INVENTOR	BEPATENT NO(S) M# 11 INVENTOR
series code/serial if not in item 1	
no 00/215 257 255529	
09/215,257 256628	A AUTOED BROOKED:
Name & Address of Party to Whom Correspondence Concerning Document Should be Mailed:	6. NUMBER INVOLVED: APPLNS 1 + PATS = TOTAL 1
Pillsbury Madison & Sutro LLP	7. AMOUNT OF FEE ENCLOSED: (Code 581)
Intellectual Property Group	ABOVE TOTAL x \$40 = \$40*
1100 NEW YORK AVENUE, N.W.	
NINTH FLOOR, EAST TOWER WASHINGTON, D.C. 20005-3918	
5.5ATTY DKT:	8. IF ABOVE FEE IS MISSING OR INADEQUATE CHARGE
5.5ATT DKT.	INSUFFICIENCY TO DEPOSIT ACCOUNT NUMBER: 03-3975
PMS 256628	UNDER ORDER NO 20263 256628
MATTER NO. CLIENT REF.	dup. sheet not required CLIENT NO. MATTER NO.
9. STATEMENT AND SIGNATURE.	
To the best of my knowledge and belief, the foregoing informa	ation is true and correct and any attached copy is a true copy of
the original document	
/D2/1999 DNGUYEN 00000168 09215257	10. Total number of pages including this
C:581 40.00 0P	cover sheet, attachments and document 12
Honz Jazum Rey No 43, 180	(do not file dup. Cover sheet)
Signature	
Attorney: Paul N. Kokulis	
Reg. No. 16773	Date:
Atty/Sec: PNK/kep TFL: (202) 861-3503	FAX: (202) 822-0944

-	OIPE		4	Ĩ
	DON NOCHONINETTIO	16-1999	DO NOT USE	FOR TRADEMARKS
	L PAIE			
٢	TO THE ASSISTANT COMMISSIONER OF PA 10- SIR: PLEASE RECORD THE ATTACHED ORIGINAL DUCUMEN	1162969	EUF.	
5	1. NAME OF CONVEYING PARTY(IES) (ASSIGNORS(S)):			
5	1. Hiroaki Tabara	2. Samuel E. Driver		
_	3. Craig C. Mello	4.		
$\dot{\mathcal{O}}$	5. 7	6.		
٦	ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACH	ED? ∐YES ⊠NO		
	2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:		·	
4	NAME: The University of Massachusetts			
m	ADDRESS: One Beacon Street, Boston, MA 02108			
	ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED?	⊠NO		•
	3. NATURE OF CONVEYANCE (DOCUMENT):			
	(Submit herewith only one document for recordation—multiple	copies of same Assig	nment signed by differe	ent inventors is one
	document)	DECT EVE	DATE: 0/40/00 9 0/4	/00
	☑ASSIGNMENT OF ☑WHOLE ☐PART INTE	HEST EXEC	. DATE: 2/19/99 & 3/1/	/99
	•			
	☐CHANGE OF NAME ☐ACCURATE TRANSLATION			
	SECURITY MERGER OTHER:			
	EXECUTION DATE(S) ON THE DECLARATION IF FILED HERE	WITH: (NOTE : IF DAT	ES ON DECLARATIO	N AND
	ASSIGNMENT DIFFER SEE ATTY!) 4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL	SHEET(S) attached?	YES NO	
	A. PAT. APP. NO.(S) M# 1st INVENTOR	B. PATENT NO(S)	M#	1st INVENTOR
	series code/serial if not in item 1		1	if not in item 1
	no			
	09/215,257 256628 Fire et al.			<u> </u>
	Name & Address of Party to Whom Correspondence Concerning Document Should be Mailed:	6. NUMBER INVOLVED: APPLNS 1 + PATS = TOTAL 1		
	Pillsbury Madison & Sutro LLP	7. AMOUNT OF FE	ENCLOSED: (Code !	581)
	Intellectual Property Group	ABOVE TOTAL x \$40 = \$40		
	1100 NEW YORK AVENUE, N.W.			
	NINTH FLOOR, EAST TOWER WASHINGTON, D.C. 20005-3918			
	5.5ATTY DKT:	8. IF ABOVE FEE IS	MISSING OR INADEQU	ATE CHARGE
			O DEPOSIT ACCOUNT	
-	PMS 256628	UNDER ORDER NO		256628
03.	MATTER NO. CLIENT REF. 22/1999 DNGJYEN 000002/5 0921525/	dup, sheet not required	CLIENT NO.	MATTER NO.
	FC:581 40.00 QP	•		
	9. STATEMENT AND SIGNATURE.			
	To the best of my knowledge and belief, the foregoing information	tion is true and correct	and any attached cop	y is a true copy of
	the original document.			
		10. Total number of		_
į	Harry Jamane Reg No 43, 180	cover sheet, attachm		5
	Signature	(do not file dup. Cov	si sileetj	<u> </u>
₹°^				
٠,	Reg. No. 16773	Date: March 19, 1	999	
1	Atty/Sec: PNK/kep TEL: (202) 861-3503	FAX: (202)		

Please return signed/recorded to: Pillsbury Madison & Sutro LLP Intellectual Property Group Ninth Floor, East Tower 1100 New York Avenue, N.W. Washington, D.C. 20005-3918

Atty. Dkt.	PMS 256628	
	M#	Client Ref.

ASSIGNMENT of U.S. Origin Patent Application (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

1)	Hiroaki Tab	ara			
2)	Samuel E. [Driver	· · · · · · · · · · · · · · · · · · ·		
3)	Craig C. Me	illo	· · · · · ·	· · · · · · · · · · · · · · · · · · ·	
4)	•		·		
(he	reinafter colle	ectively ASSIGNOR), ha	as/have made	an invention known as Dkt.	PMS 256628
and	l entitled: G	Senetic Inhibition by Do	uble-Stranded	RNA	
for	which an app	olication for Letters Pate	ent of the Unite	d States	
	was executed	d even date herewith ar	nd is about to b	e filed in the United States	Patent and Trademark Office;
\boxtimes	was filed on	December 18, 1998	, Appln. No.	09/215,257	;
	ે		-		_
	AND WH	IEREAS The University	of Massachus	etts (hereinafter ASSIGNE	Ē), ⊠ a corporation 🔲
Lim	nited Partners	ship duly organized and	l existing under	r the laws of the State of $ {f M} $	assachusetts and having its
prii	ncipal office a	ind place of business a	t <u>One Beacon</u>	Street, Boston, MA 02108, o	desires to acquire an interest
the	rein;				

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the said invention in the United States and all foreign countries, as described in the aforesaid application, and to the said application and to all continuations, divisions, reissues and substitutes of said application, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and ASSIGNOR hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

PAT-114B 11/97

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, and without further remuneration, to execute any and all papers desired by said ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE.

NOTE: The undersigned hereby authorizes Pillsbury Madison & Sutro LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

Executed on the date(s) below indicated.

`<u>-</u>--

<u>Signature</u>	Date Signed	viitiess
Airoaki Jabara 1) × 田原 浩昭 Name: Hiroaki Tabara	×2/19/99	× medi >
2) Name: Samuel E. Driver		
3) Name: Craig C. Mello	2/19/99	+9765 35
4) Name:		

Pilease return signed/recorded to: Pillsbury Madison & Sutro LLP Intellectual Property Group Ninth Floor, East Tower 1100 New York Avenue, N.W. Washington, D.C. 20005-3918

Atty. Dkt.	PMS 256628	i	
	M#	Client	Ref.

ASSIGNMENT of U.S. Origin Patent Application (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

1)	Hiroaki Tab	ara			
2)	Samuel E. 0	Oriver	- · · · · · · · · · · · · · · · · · · ·		
3)	Craig C. Me	ilo			· · · · · · · · · · · · · · · · · · ·
4)	4 1 1 				
		ectively ASSIGNOR), had benetic Inhibition by Do		an invention known as Dkt. RNA	PMS 256628
	was executed	lication for Letters Pated even date herewith ar December 18, 1998	nd is about to b	e filed in the United States I	Patent and Trademark Office;
prir	ited Partners	ship duly organized and	existing under	etts (hereinafter ASSIGNEE the laws of the State of <u>Ma</u> Street, Boston, MA 02108, d	· — · —

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the said invention in the United States and all foreign countries, as described in the aforesaid application, and to the said application and to all continuations, divisions, reissues and substitutes of said application, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and ASSIGNOR hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

PAT-114B 11/97

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, and without further remuneration, to execute any and all papers desired by said ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE.

<u>NOTE</u>: The undersigned hereby authorizes Pillsbury Madison & Sutro LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

<u>Signature</u>	<u>Date Signed</u>	<u>Witness</u>
1) Name: Hiroaki Tabara		
2) Z D D Name: Samuel E. Driver	× 3/1/99	x Justindra Jungt
Name: Craig C. Mello		<u>K</u>
A) Name:		

16773

Reg. No.

Atty/Sec: PNK/kep

カチ



101163112 TO THE ASSISTANT COMMISSIONER SIR: PLEASE RECORD THE ATTACHED ORIGINAL DOCUMENTS OR COPY THEREOF. 1. NAME OF CONVEYING PARTY(IES) (ASSIGNORS(S)): 2. Sigun Xu 1. Andrew Z. Fire 4. Stephen A. Kostas 3. Mary K. Montgomery 6. 5. Lisa Timmons 8. ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACHED? ☐YES ☑NO 2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST: NAME: The Carnegie Institution of Washington ADDRESS: 1530 P Street, N.W., Washington, D.C. 20005 ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? ☐YES ☐NO 3. NATURE OF CONVEYANCE (DOCUMENT): (Submit herewith only one document for recordation—multiple copies of same Assignment signed by different inventors is one document) EXEC. DATE: 1/12/99;1/15/99; 1/20/99; 1/22/99; **⊠WHOLE** PART INTEREST **MASSIGNMENT OF** 1/29/99 ☐ACCURATE TRANSLATION CHANGE OF NAME **□**OTHER: MERGER SECURITY EXECUTION DATE(S) ON THE DECLARATION IF FILED HEREWITH: (NOTE: IF DATES ON DECLARATION AND ASSIGNMENT DIFFER SEE ATTY!) 4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL SHEET(S) attached? **IYES** 19 INVENTOR B. PATENT NO(S) M# 1st INVENTOR A. PAT. APP. NO:(S) M# if not in item 1 if not in item 1: series code/serial no 09/215,257 256628 NUMBER INVOLVED: 5. Name & Address of Party to Whom Correspondence = TOTAL 1 Concerning Document Should be Mailed: APPLNS 1 + PATS ____ 7. AMOUNT OF FEE ENCLOSED: (Code 581) **Pillsbury Madison & Sutro LLP** ABOVE TOTAL x \$40 = \$40Intellectual Property Group 1100 NEW YORK AVENUE, N.W. NINTH FLOOR, EAST TOWER WASHINGTON, D.C. 20005-3918 8. IF ABOVE FEE IS MISSING OR INADEQUATE CHARGE 5.5ATTY DKT: INSUFFICIENCY TO DEPOSIT ACCOUNT NUMBER: 03-3975 20263 256628 UNDER ORDER NO PMS 256628 MATTER NO. dup, sheet not required CLIENT NO. CLIENT REF. MATTER NO. 03/22/1999 DHGUYEN 00000278 09215257 40.00 MP 01 EC:581 9. STATEMENT AND SIGNATURE. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. 10. Total number of pages including this 11 cover sheet, attachments and document Januagaure Reg No 43, 180 Signature (do not file dup. Cover sheet) Paul N. Kokulis Attorney:

TEL: (202) 861-3503

Date:

March 19, 1999

FAX: (202) 822-0944

ease return signed/recorded to: Ilsbury Madison & Sutro LLP tellectual Property Group nth Floor, East Tower 100 New York Avenue, N.W. 'ashington, D.C. 20005-3918

Atty. Dkt. PMS 256628		
•	M#	Client Ref.

ASSIGNMENT of U.S. Origin Patent Application (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

)	Andrew Fire
2) -	Si Q. Xu
3) -	Mary K. Montgomery
4)	Stephen A. Kostas
5) (hei	Lisa Timmons reinafter collectively ASSIGNOR), has/have made an invention known as Dkt. PMS 256628
for	which an application for Letters Patent of the United States was executed even date herewith and is about to be filed in the United States Patent and Trademark Office;
Ø	was filed onDecember 18, 1998, Appln. No09/ 215,257; AND WHEREAS The Carnegie Institution of Washington (hereinafter ASSIGNEE), \[\subseteq \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

AND WHEREAS The Carnegie Institution of Washington (hereinafter ASSIGNEE), 🔀 a corporation Limited Partnership duly organized and existing under the laws of the District of Columbia and having its principal office and place of business at 1530 P Street, N.W., Washington, DC 20005, desires to acquire an interest therein;

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the said invention in the United States and all foreign countries, as described in the aforesaid application, and to the said application and to all continuations, divisions, reissues and substitutes of said application, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and ASSIGNOR hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, and without further remuneration, to execute any and all papers desired by said ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE.

NOTE: The undersigned hereby authorizes Pillsbury Madison & Sutro LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

<u>Signature</u>	Date Signed	Witness
1) × Chule + Name: Andrew Fire	× 1/15/99	Hating Englar Handa a. Henry
2) Name: Si Q. Xu		
Name: Mary K. Montgomery		
4)Name: Stephen A. Kostas		
5) Name: Lisa Timmons		<u> </u>

Please return signed/recorded to: Pillsbury Madison & Sutro LLP ntellectual Property Group Ninth Floor, East Tower 1100 New York Avenue, N.W. Washington, D.C. 20005-3918

Atty. Dkt.	PMS 256628	_1
	M#	Client Ref.

ASSIGNMENT of U.S. Origin Patent Application (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

1)	Andrew Fire
2)	Siq.Xu Siqun Xu
3)	Mary K. Montgomery
4)	Stephen A. Kostas
5)	Lisa Timmons
(he	reinafter collectively ASSIGNOR), has/have made an invention known as Dkt. PMS 256628
	l entitled: Genetic Inhibition by Double-Stranded RNA
	which an application for Letters Patent of the United States was executed even date herewith and is about to be filed in the United States Patent and Trademark Office; was filed on
pr	AND WHEREAS The Carnegie Institution of Washington (hereinafter ASS:GNEE), a corporation ited Partnership duly organized and existing under the laws of the District of Columbia and having its notipal office and place of business at 1530 P Street, N.W., Washington, DC 20005, desires to acquire an erest therein;
	NOW THEREFORE in consideration of Ten Dollars (\$10.00) and other good and valuable consideration

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the said invention in the United States and all foreign countries, as described in the aforesaid application, and to the said application and to all continuations, divisions, reissues and substitutes of said application, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and ASSIGNOR hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

PAT-114B 11/97

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, and without further remuneration, to execute any and all papers desired by said ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE.

NOTE: The undersigned hereby authorizes Pillsbury Madison & Sutro LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

<u>Signature</u>	Date Signed	<u>Witness</u>
1) Name: Andrew Fire		
Name: Si Q . Xu	<u> </u>	× Hui Shao
3) Name: Mary K. Montgomery		· .
4) Name: Stephen A. Kostas		
5) Name: Lisa Timmons		

Please return signed/recorded to: Pillsbury Mædison & Sutro LLP Intellectual Property Group Ninth Floor, East Tower 1100 New York Avenue, N.W. Washington, D.C. 20005-3918

Atty. Dkt.	PMS 256628		
	M#	Client Ref.	

ASSIGNMENT of U.S. Origin Patent Application (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

1)	Andrew Fire	
2)	Si Q. Xu	
3)	Mary K. Montgomery	
4)	Stephen A. Kostas	
5)	Lisa Timmons	
/he	ereinafter collectively ASSIGNOR), has/have made an invention known as Dkt.	PMS 256628
	d entitled: Genetic Inhibition by Double-Stranded RNA	-3
for	which an application for Letters Patent of the United States was executed even date herewith and is about to be filed in the United States F was filed on December 18, 1998 , Appln. No. 09/ 215,257	Patent and Trademark Office; ;
pr	AND WHEREAS <u>The Carnegie Institution of Washington</u> (hereinafter ASS mited Partnership duly organized and existing under the laws of the District of <u>Carnegial of the District of Carnegial Office and place of business at 1530 P Street, N.W., Washington, DC 20 terest therein;</u>	columbia and having its

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the said invention in the United States and all foreign countries, as described in the aforesaid application, and to the said application and to all continuations, divisions, reissues and substitutes of said application, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and ASSIGNOR hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, and without further remuneration, to execute any and all papers desired by said ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE.

NOTE: The undersigned hereby authorizes Pillsbury Madison & Sutro LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

<u>Signature</u>	Date Signed	<u>Witness</u>
1) Name: Andrew Fire		
2) Name: Si Q. Xu		
3) May (Montar Name: Mary K. Montgomery	× 1/29/99	* latricia By for
Name: Stephen A. Kostas		
5) Name: Lisa Timmons		

ease return signed/recorded to: Isbury Madison & Sutro LLP ellectual Property Group nth Floor, East Tower 00 New York Avenue, N.W. ashington, D.C. 20005-3918

interest therein;

Atty. Dkt.	PMS 256628		_
	M#	Client Ref.	

ASSIGNMENT of U.S. Origin Patent Application (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

) Andrew Fire	
e) Si Q. Xu	
Mary K. Montgomery	
Stephen A. Kostas	
5) Lisa Timmons (hereinafter collectively ASSIGNOR), has/have made an invention known as Dkt.	PMS 256628
and entitled: Genetic Inhibition by Double-Stranded RNA for which an application for Letters Patent of the United States ☐ was executed even date herewith and is about to be filed in the United States F ☐ was filed on December 18, 1998 , Appln. No. 09/ 215,257	Patent and Trademark Office;
AND WHEREAS The Carnegie Institution of Washington (hereinafter ASS Limited Partnership duly organized and existing under the laws of the District of grincipal office and place of business at 1530 P Street, N.W., Washington, DC 20	SIGNEE), a corporation Columbia and having its 0005, desires to acquire an

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the said invention in the United States and all foreign countries, as described in the aforesaid application, and to the said application and to all continuations, divisions, reissues and substitutes of said application, together with the right of priority under the International Convention for the Protection of Industrial application, together with the right of Patents, Designs and Industrial Models, and any other Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and ASSIGNOR hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

PAT-114B 115

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, and without further remuneration, to execute any and all papers desired by said ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE.

NOTE: The undersigned hereby authorizes Pillsbury Madison & Sutro LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

<u>Signature</u>	<u>Date Signed</u>	<u>vviu iess</u>	ें अं अ
1) Name: Andrew Fire			
2)Name: Si Q. Xu	· · · · · · · · · · · · · · · · · · ·		
3) Name: Mary K. Montgomery			
4) Alexandra A. A. A. Name/ Stephen A. Kostas	× Jan. 20, 1999	Satresial L	Lexilar Beneg
5) Name: Lisa Timmons	··· .		

Please return signed/recorded to: Pillsbury Madison & Sutro LLP Intellectual Property Group Ninth Floor, East Tower 1190 New York Avenue, N.W. Washington, D.C. 20005-3918

Atty. Dkt.	PMS 256628	i ·
	M#	Client Ref.

ASSIGNMENT of U.S. Origin Patent Application (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

Í)	Andrew Fire
2)	Si Q. Xu
3)	Mary K. Montgomery
4)	Stephen A. Kostas
5)	Lisa Timmons
(he	reinafter collectively ASSIGNOR), has/have made an invention known as Dkt. PMS 256628
and	d entitled: Genetic Inhibition by Double-Stranded RNA
	which an application for Letters Patent of the United States was executed even date herewith and is about to be filed in the United States Patent and Trademark Office; was filed on December 18, 1998 , Applin. No. 09/ 215, 257
pri	AND WHEREAS The Carnegie Institution of Washington (hereinafter ASSIGNEE), a corporation mitted Partnership duly organized and existing under the laws of the District of Columbia and having its incipal office and place of business at 1530 P Street, N.W., Washington, DC 20005, desires to acquire an erest therein;

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the said invention in the United States and all foreign countries, as described in the aforesaid application, and to the said application and to all continuations, divisions, reissues and substitutes of said application, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and ASSIGNOR hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, and without further remuneration, to execute any and all papers desired by said ASSIGNEE for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE.

<u>NOTE</u>: The undersigned hereby authorizes Pillsbury Madison & Sutro LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

<u>Signature</u>		<u>Date Signed</u>	Witness	
1)				
Nam	e: Andrew Fire			
2)		<u></u>		
Nam	e: Si Q. Xu			
3)				
Nam	ne: Mary K. Montgomery	·		
4)	Storbon A. Koston	·		
Мап	ne: Stephen A. Kostas		1	
5) × 1	ne: Lisa Timmons	×1/22/90	+ Justita	t Casaller
IVAII	no. Lisa (IIIIIIII)	•	· <i>Y</i>	

Attorney Scket No. 056100-5021-01 U.S. Patent No. 6,506,559

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:)
Andrew Z. FIRE et al.)
U.S. Patent No.: 6,506,559) PETITION UNDER 37 C.F.R. § 1.183) TO WAIVE THE RULES UNDER
Application No.: 09/215,257) 37 CFR §3.81(a)
Filed: December 18, 1998)
Issued: January 14, 2003)
CONTEST OF THE PROPERTY OF THE) ** Hand-Carry To Office Of Petitions
For: GENETIC INHIBITION BY DOUBLE STRANDED RNA) Crystal Plaza 4, Room 3-C23 **)
Office of Petitions	RECEIVED
Assistant Commissioner for Patents	V
Washington, D.C. 20231	JAN 22 2003
5 ,	OFFICE OF PETITIONS
	Attian a

This is a Petition under 37 C.F.R. § 1.183 to request that the requirements of 37 C.F.R. § 3.81(a) be waived to permit the correct names of the assignees of the above-mentioned patent to be provided after issuance of the patent. Accompanying this petition is a second petition requesting that the front page of the original Letters Patent be reprinted pursuant to 37 CFR §1.182 to reflect the correct names of the assignees. The original Letters Patent is surrendered herewith to facilitate reprinting of the first page.

Sir:

On October 22, 2002, Applicant's agent submitted two copies of Issue Fee Transmittal Form PTOL-85B noting the sole assignee as "Carnegie Institute of Washington." This assignee designation was erroneous in two respects:

A second assignment to "The University of Massachusetts" was recorded on March 19,
 1999, at Reel/Frame 009825/0207 (copies of the Notice of Recordation and assignment documents are attached hereto); and

ATTORNEY DOCALT NO.: 056100-5021-01

Patent No.: 6,506,559

Petition Under 37 C.F.R. § 1.183 - Page 2

"Institute" should actually be "Institution" (see copies of Notice of Recordation and assignment attached hereto). Thus, the correct name of the first assignee should be "Carnegie <u>Institution</u> of Washington," and "The University of Massachusetts" should be included on the face of the patent as the second assignee.

The failure to include the correct information pertinent to the assignment held by the University of Massachusetts was an inadvertent oversight, as was the misspelling of the assignee name that was indicated on the Issue Fee Transmittal document, PTOL-85B. The error was recognized immediately upon the PTO's homepage posting of U.S. 6,506,559, and this petition and the accompanying petition under §1.182 have been filed immediately upon receipt of the original Letters-Patent.

According to 37 CFR §1.183, in an extraordinary situation, when justice requires, any requirement of the regulations which is not a requirement of the statutes may be suspended or waived by the Commissioner or the Commissioner's designee, or on petition of the interested party, subject to such other requirements as may be imposed. In the present case, justice requires that the correct assignees be named on the face of the patent, because the patent covers one of the most important inventions of the year, an invention that is jointly owned by Carnegie Institution of Washington and The University of Massachusetts. We anticipate high public interest in this patent and wish to insure that the public is immediately cognizant of the co-ownership of the patent. Further, we wish to avoid public reliance on incomplete assignment information. These goals can only be achieved by reprinting the front page of US 6,506,559 and correcting the information in the electronic databases that are available to the public.

ATTORNEY DOCKET NO.: 056100-5021-01

Patent No.: 6,506,559

Petition Under 37 C.F.R. § 1.183 - Page 3

To demonstrate the importance of the invention claimed in U.S. Patent No. 6,506,559, attached hereto are several scientific articles demonstrating the excitement of the biotechnology community towards the claimed technology. For instance, the attached article recently published by Science magazine (Vol. 298, Dec. 20, 2002) heralded the technology - which has been dubbed "RNA interference" - as the #1 scientific breakthrough of the year 2002. The article further notes how the true power of double-stranded RNA in the inhibition of gene expression was not appreciated until the work of Andrew Fire of the Carnegie Institution of Washington, Craig Mello of the University of Massachusetts and their colleagues (the inventors of U.S. 6,506,559) (see the paragraph bridging columns 1 and 2, page 2296).

The attached excerpt from the Aug. 6, 2002, edition of The Wall Street Journal also discusses how the work of Andrew Fire and Craig Mello (two of the inventors of U.S. Patent 6,506,559) "set off a flurry of activity, as it dawned on scientists that if gene-silencing was working in plants, and now in worms, it might be a general phenomenon in all animals." Indeed, as summarized in a recent Genetic Engineering News article (Vol. 22, Dec. 21, 2002), several companies have since been founded solely on the promise of RNA interference therapies (see the bottom of col. 1 on page 3), and several other companies are supplying RNA interference reagents and kits for using RNA interference to silence gene expression in virtually any cell line (see first textual column on page 80). The attached copy of the agenda for the conference entitled Applications of RNA Interference to take place on February 10-11, 2003, in San Diego, California, also demonstrates the high quantity of recent activity that has occurred in the area of RNA interference.

U.S. Patent No. 6,506,559 is the first issued U.S. patent to cover methods of inhibiting gene expression using double-stranded RNA. A substantial number of licensees have already

ATTORNEY DOCALT NO.: 056100-5021-01

Patent No.: 6,506,559

Petition Under 37 C.F.R. § 1.183 - Page 4

licensed the invention now patented in U.S. 6,506,559 based solely on the corresponding published PCT application. Furthermore, a substantial number of additional licenses are expected to be negotiated now that U.S. 6,506,559 has issued. Given the importance of the invention and the number of readers that will no doubt request a copy of the patent, it is only fair that both of the owners of this important invention are shown on the face of the patent. Listing the second assignee in a certificate of correction rather than on the face of the patent would not serve justice adequately, since the face of the patent would be viewed by potential readers much more frequently than a certificate attached to the patent. Failure to correct the face of the patent to reflect the names of both assignees would rob the second assignee of its due recognition as a co-owner of the invention, an injustice that should not prevail solely because the Applicant's agent made an inadvertent error in completing the PTOL-85 form.

ATTORNEY DOC. 1056100-5021-01

Patent No.: 6,506,559

Petition Under 37 C.F.R. § 1.183 - Page 5

The \$130.00 petition fee required by 37 C.F.R. § 1.17(h) is being submitted with this Petition. Applicants have also included payment of \$100.00 for placement of a certificate of correction in the archives as advised by the Petitions Branch. The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment, to Deposit Account 50-0310.

JAN 2 2 2003
OFFICE OF PETITIONS

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

Bonnie Weiss McLeod, Ph.D.

Reg. No. 43,255

January 22, 2003

CUSTOMER NO.: 009629

MORGAN, LEWIS & BOCKIUS LLP

1111 Pennsylvania Avenue, N.W.

Washington, D.C. 20004 Telephone: 202-739-3000 Facsimile: 202-739-3001

Attachments:

- Petition under 37 CFR §1.182 to Reprint the Front Page of the Letters Patent
- Notice of Assignment recordation and assignment for University of Massachusetts
- Notice of Assignment recordation and assignment for Carnegie Inst. of Washington
- Letters Patent
- Journal article: Science, Dec. 2002, Vol. 298, pages 2296-97
- Journal article: excerpt from The Wall Street Journal, Tuesday, Aug. 6, 2002
- Journal article: Genetic Engineering News, Dec. 2002, Vol. 22(21), pages 1, 3, 70 & 80
- Meeting agenda, Applications of RNA Interference, Feb. 10-11, San Diego, CA

Patent Assignment Abstract of Title

Total Assignments: 2

Application #: <u>09215257</u> **Filing Dt:** 12/18/1998 Patent #: 6506559 Issue Dt: 01/14/2003

Publication #: NONE PCT #: NONE

Inventors: ANDREW Z. FIRE, SIQUN XU, MARY K. MONTGOMERY, STEPHEN A. KOSTAS, LISA

TIMMONS, HIROAKI TABARA, SAMUEL E. DRIVER, CRAIG C. MELLO

Title: GENETIC INHIBITION BY DOUBLE-STRANDED RNA

Assignment: 1

Reel/Frame: <u>009825/0120</u> Received: <u>03/23/1999</u>

Recorded: 03/19/1999

Mailed: 04/12/2000

Exec Dt: 01/15/1999

Pages: 11

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors: FIRE, ANDREW Z.

XU, SIQUN

Exec Dt: 01/12/1999

MONTGOMERY, MARY K.

Exec Dt: 01/29/1999

KOSTAS, STEPHEN A.

Exec Dt: 01/20/1999

TIMMONS, LISA

Exec Dt: 01/22/1999

Assignee: CARNEGIE INSTITUTION OF WASHINGTON, THE

1530 P STREET, N.W.

WASHINGTON, DISTRICT OF COLUMBIA 20005

Correspondent: PILLSBURY MADISON & SUTRO LLP

PAUL N. KOKULIS

1100 NEW YORK AVENUE, N.W. NINTH FLOOR, EAST TOWER WASHINGTON, DC 20005-3918

Assignment: 2

Reel/Frame: 009825/0207 03/23/1999

Recorded: 03/19/1999

Mailed: 12/01/1999

Pages: 5

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors: TABARA, HIROAKI

Exec Dt: 02/19/1999

DRIVER, SAMUEL E.

Exec Dt: 03/01/1999

MELLO, CRAIG C.

Exec Dt: 02/19/1999

Assignee: UNIVERSITY OF MASSACHUSETTS, THE

ONE BEACON STREET

BOSTON, MASSACHUSETTS 02108

Correspondent: PILLSBURY MADISON & SUTRO LLP

PAUL N. KOKULIS

1100 NEW YORK AVENUE, NW 9TH FLOOR, EAST TOWER WASHINGTON, DC 20005-3918

Search Results as of: 9/3/2003 9:28:03 A.M.



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

NOVEMBER 29, 1999

PTAS

PILLSBURY MADISON & SUTRO LLP PAUL N. KOKULIS 1100 NEW YORK AVENUE, N.W. NINTH FLOOR, EAST TOWER WASHINGTON, D.C. 20005-3918



CORRECTED NOTICE

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/19/1999

REEL/FRAME: 009825/0120

NUMBER OF PAGES: 11

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

FIRE, ANDREW Z.

DOC DATE: 01/15/1999

ASSIGNOR:

MONTGOMERY, MAY K.

DOC DATE: 01/29/1999

ASSIGNOR:

TIMMONS, LISA

DOC DATE: 01/22/1999

ASSIGNOR:

XU, SIQUN

DOC DATE: 01/12/1999

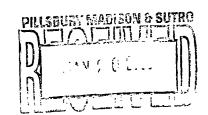
ASSIGNOR:

KOSTAS, STEPHEN A.

DOC DATE: 01/20/1999

ASSIGNEE:

CARNEGIE INSTITUTION OF WASHINGTON, THE 1530 P STREET, N.W. WASHINGTON, D.C. 20005



009825/0120 PAGE 2

SERIAL NUMBER: 09215257

PATENT NUMBER:

FILING DATE: 12/18/1998

ISSUE DATE:

JACQUELINE MOORE, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

NOVEMBER 19, 1999

PTAS

PILLSBURY MADISON & SUTRO LLP PAUL N. KOKULIS 1100 NEW YORK AVENUE, NW 9TH FLOOR, EAST TOWER WASHINGTON, DC 20005-3918



CORRECTED NOTICE

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/19/1999

REEL/FRAME: 009825/0207

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RECEIVED

DOC DATE: 02/19/1999

ASSIGNOR:

JAN 22 2003

DRIVER, SAMUEL E.

TABARA, HIROAKI

OFFICE OF PETITIONS

DOC DATE: 03/01/1999

ASSIGNOR:

MELLO, CRAIG C.

DOC DATE: 02/19/1999

ASSIGNEE:

UNIVERSITY OF MASSACHUSETTS, THE ONE BEACON STREET

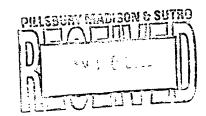
BOSTON, MASSACHUSETTS 02108

SERIAL NUMBER: 09215257

PATENT NUMBER:

FILING DATE: 12/18/1998

ISSUE DATE:



009825/0207 PAGE 2

ANNE HARRELL, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS